TECHNICAL MEMORANDUM

Utah Regulatory Program

July 14, 2010

TO:

Internal File

THRU:

FROM:

James D. Smith, Permit Supervisor Peter Hess, En Sci III, Inspector / Engineering and Bonding

PROPOSED OFFICE

PROPOSED OFFI

RE:

PROPOSED OFFICE EXTENSION, Savage Services Corporation,

Savage Coal Terminal, C/007/022, Task ID # 3590

SUMMARY:

The Permittee, Savage Services Corporation, submitted an application prepared by Blackhawk Engineering Company to add a 25 X 45 foot addition on the Main Office / Bath House building at the Coal Terminal. The existing building and the new addition are both steel construction. The application was received on July 12, 2010.

TECHNICAL ANALYSIS:

OPERATION PLAN

SUPPORT FACILITIES AND UTILITY INSTALLATIONS

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

Analysis:

As noted in the opening summary, Savage Services Corporation is proposing to add a 25 foot X 45 foot addition to the already existing office and bath house building. The need for the addition is to provide shower and clothing change facilities in accordance with the requirements of 30 CFR 1712 Bath Houses and Toilet Facilities One half of the 25 X 45 foot addition will serve as a break / lunch room with cooking and food preparation capability, and include an office for supervisory personnel (See Appendix 5-3, Office Building Extension, Attachment 1, Plan of Proposed Office Building Extension).

According to Page 1 of Appendix 5-3, Office Building Extension "existing utilities (water, sewer, and power) will not need to be modified" to accommodate the new bathing / toilet facilities. Existing services are adequate to accommodate this 11,250 cubic foot addition.

The submitted application contains the following revisions to the currently approved mining and reclamation plan:

- 1) A revised Table of Contents for the Chapter 5 Engineering Section of the MRP, which adds Appendix 5-3, Office Building Extension to the approved information.
- 2) Revised pages 2, 3 and 32 of the Chapter 5 information.
 - a. Page 2 adds the construction date period for the 25 X 45 X 10 foot Office Building Extension
 - b. Page 3 makes the verbiage revision to the MRP text to add Appendix 5-3 to the <u>Buildings and Structures</u> section of Chapter 5.
 - c. Page 32 section 526.115 (See R645-301-526.115) discusses the "only proposed structure modification" at the Savage Coal terminal site, which is the office building expansion. This building modification will in no way affect the interests of the public or the surrounding landowners adjacent to the Coal Terminal permit area.

The proposed office building extension will not damage or destroy any services provided by oil, gas or water wells, gas transmission lines, electrical transmission lines or any other major utility. None of these pass through the Savage Coal Terminal permit / disturbed area (See R645-301-526.210).

The proposed new addition to the office building will be operated in accordance with the State of Utah issued R645 Coal Mining permit identified as C/007/022. The Task ID # 3590 application contains adequate design drawings to meet the requirements of R645-301-526.220.

The proposed office building extension will not require any changes to the surface runoff / drainage control plan.

The current methods utilized to prevent effects to fish, wildlife and related environmental effects in the Savage Coal Terminal permit area are adequate. All runoff and sediment control devices which are in place are adequate to effectively treat runoff; the new building expansion will have no effect on suspended solid contribution to streamflow or runoff outside the permit area.

Savage has obtained a building permit from Carbon County for this building expansion.

Findings:

The Task ID # 3590 application adequately addresses the minimum regulatory requirements of R645-301-526.200, Utility Installation and Support Facilities.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Affected Area Maps

Mining Facilities Maps

The Permittee's application, identified as Task ID # 3590, contains a revised Plate 5-2, Savage Coal Terminal Facility Map, which shows the newly proposed addition to the Main office / bath house facility. The proposed office extension is depicted in bright red on this Plate.

Certification Requirements

The revised Plate 5-2, Savage Coal Terminal Facility Map was stamped, signed and dated by Mr. Dan Guy, Utah registered professional engineer, on July 6, 2010, meeting the certification requirement established under R645-301-512.120, Surface Facilities and Operations.

Findings:

The Task ID # 3590 application meets the minimum regulatory requirements of this section of the R645 Coal Mining Rules.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

General

The disturbed area acreage associated with the Savage Coal Terminal amounts to 132.5 acres.

Form of Bond

The Division holds a surety bond in the amount of \$2,525,000.00 issued by Liberty Mutual Insurance Company, which has an A. M. Best rating of "A". The bond identification number is **965-003-641**.

Determination of Bond Amount

The Permittee submitted a reclamation cost estimate for the $25 \times 45 \times 10$ foot main building extension using the unit costs which were utilized to prepare the June 2007 bond revision / update.

The Division requested that the Permittee update the reclamation estimate using more current unit costs. Blackhawk Engineering Company submitted the updated reclamation cost estimate on July 14, 2010. The new calculation estimates that the office building expansion can be reclaimed and disposed of for \$5,306.00 (This is the total of the direct and estimated indirect costs). 2009 unit costs from R.S. Means *Heavy Construction Cost Data* were used in the estimate.

Therefore, the total reclamation cost for the Savage site in 2009 dollars amounts to \$2,067,591.92.

The escalated reclamation cost to 2013 (3 years) at a 1.005 escalation factor for 2010 amounts to \$2,098,605.80.

The posted bond amount is \$2,525,000.00, which is \$426,000.00 in excess of the calculated reclamation cost estimate (+16.9 %).

Terms and Conditions for Liability Insurance

The Permittee maintains general liability insurance which is renewed annually, in accordance with the R645 Coal Mining Rules.

Findings:

The posted bond amount is adequate to reclaim the Savage Coal Terminal permit area.

RECOMMENDATION:

The Division should approve application / Task ID # 3590, Office Building Expansion.

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Direct Costs

Subtotal Demolition and Removal Subtotal Backfilling and Grading Subtotal Revegetation Direct Costs	\$906,772.00 \$493,173.00 \$230,648.00 \$1,630,593.00	
Indirect Costs Mob/Demob Contingency Engineering Redesign Main Office Expense Project Mainagement Fee Subtotal Indirect Costs	\$436,998.92	10.0% 5.0% 2.5% 6.8% 2.5% 26.8%
Total Cost 2009 Dollars	\$2,067,591.92	
Number of years Escalation Factor for 2010 Escalation	\$31,013.88	3 1.005 1.015
Number of years Escalation Factor Escalation Escalated Reclamation Cost to 2013 Reclamation Cost (Rounded to nearest \$1,000) Posted Bond 2007 Difference Between Cost Estimate and Bond Percent Difference	\$2,098,605.80 \$2,099,000.00 \$2,525,000.00 \$426,000.00 16.90%	

Task ID # 3590 Office Building Expansion